

### Historic Assay Loader (HAL)

This document is a quick guide to the maxgeo Historic Assay Loader. In particular, Below Detection Limits (BDLs) and assay substitutions. The scenarios described are for single or multiple BDLs in the file to be loaded.

#### Consistent BDLs

In an ideal world, even when loading compiled historic assays, BDLs would be consistent for each element in the whole compiled file thus the easiest option is to set the lower limit in the import screen:

The screenshot shows the 'Normalise Historic Assays' interface with the following steps:

- Step 1:** Import screen with 'Import' button and 'Select source table - excludes TBL prefixed tables' dropdown set to 'tmpImportBuffer'. A red circle highlights the 'Do you know the Lower Detection Limit?' checkbox, which is checked.
- Step 2:** Source file selection screen with 'Source file as it will be recorded in assay batch table' dropdown set to 'tmpImportBuffer'.
- Step 3:** Sample ID Field selection screen with 'Sample ID Field' dropdown set to 'SampleID'.
- Step 4:** Lab Code selection screen with 'Lab Code' dropdown.
- Step 5:** Batch Number selection screen with 'Batch Number' dropdown set to 'Batch\_No' (radio button selected).
- Step 6:** Detection Limits screen with 'Do you know the Lower Detection Limit?' checked (highlighted by a red circle) and 'Do you know the Upper Detection Limit?' unchecked.
- Step 7:** Assay results configuration screen with 'Assay results' section listing fields: LabElement, LimitLower, OrigMethod, UnitCode, AssayResult, AssayResultNum, LabCode, Repeat, GenericMethod, Element, SourceRowNumber.
- Step 8:** Lab Element configuration screen with 'Lab Element' dropdown, 'Element' dropdown, 'Repeat' dropdown, 'UnitCode' dropdown set to 'ppm', 'Original Method' dropdown set to 'UNKN', 'Generic Method' dropdown, 'Post Processing' dropdown set to 'Default', 'Exception Type' dropdown set to 'RAW', and 'Lower Det. Limit' input field set to '0.01' (highlighted by a red circle).
- Step 9:** Append Samples progress screen.

### Mixed BDL Values Single Element

More often than not, when loading compiled historic assays, there is a mixture of BDL values for a single element.

There is a relatively simple way to get the HAL to recognise BDL values and set the lower limits automatically. This is achieved by creating a “dummy” HAL import layout\* and updating the tblSYSAssBatch ‘ImportLayout’ field for the historic assay batches loaded via the HAL. This will depend on how many batches you can update in tblSYSAssBatch directly or via a SQL script if there are several batches.

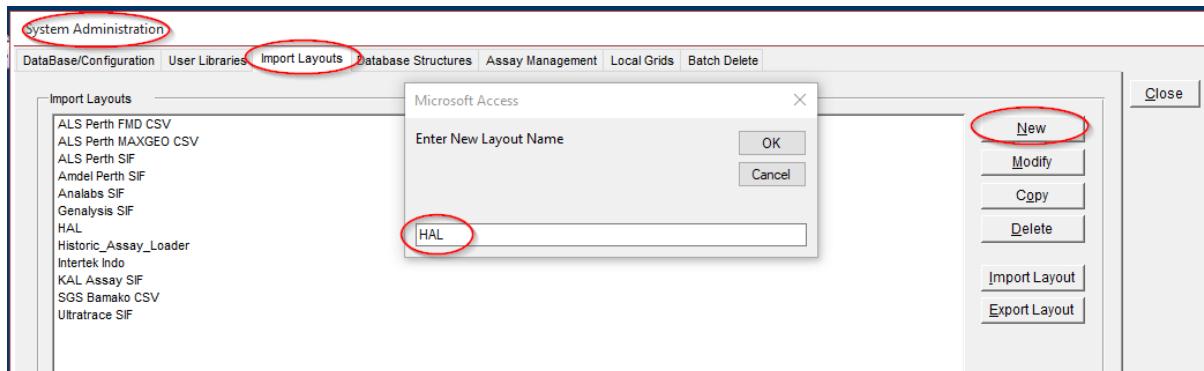
For example:

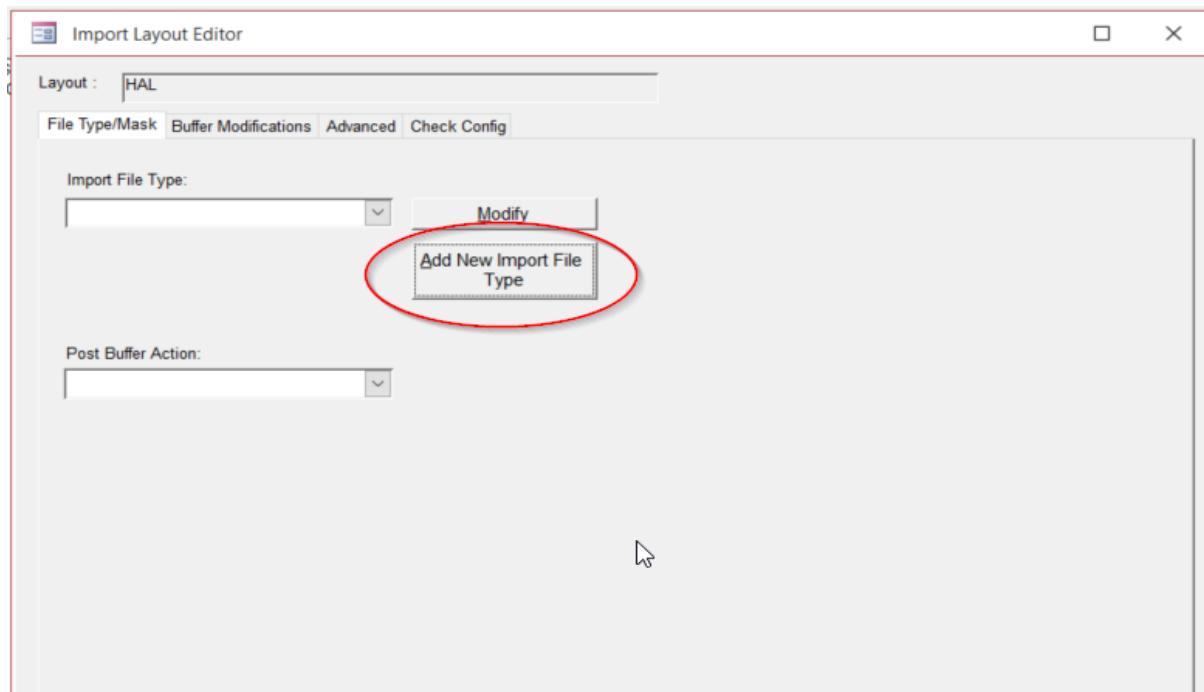
```
UPDATE tblSYSAssBatch SET tblSYSAssBatch.ImportLayout = 'HAL'  
WHERE tblSYSAssBatch.LabCode='COMP_ALS'  
AND tblSYSAssBatch.Batch_No='COMP_ALS'  
AND tblSYSAssBatch.SourceFile='HistoricAssays'
```

\*Note: Assay substitutions can be handled as part of this process also

Set up the “dummy” import layout using the following steps:

Create a new layout

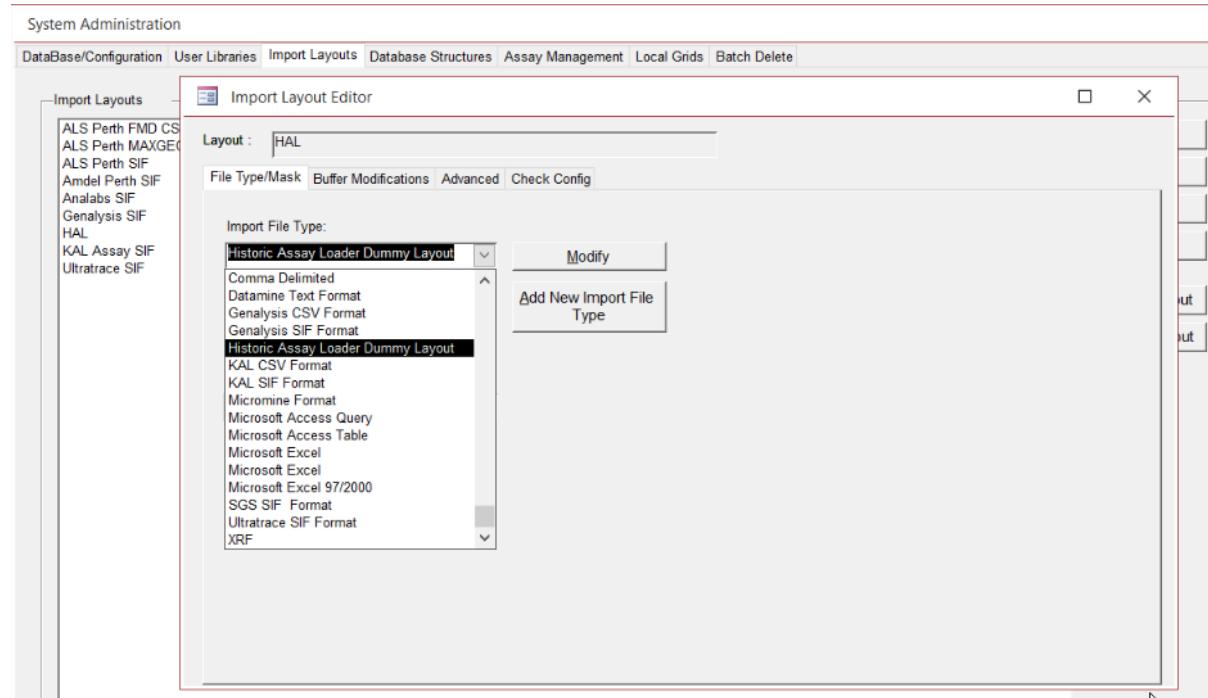




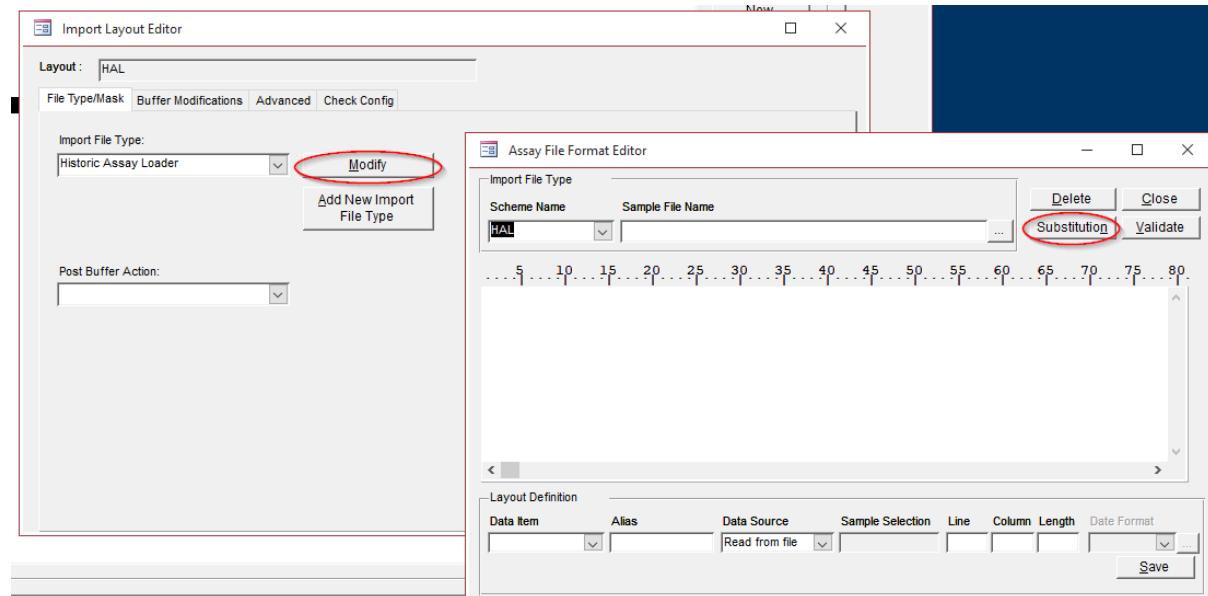
Add the new 'dummy' HAL layout type:

file_type	basic_type	details_row	description
ALS_FMD_CSV	CSV	18	ALS FMD CSV Format
ALS_MAXGEO_CSV	CSV	13	ALS MAXGEO CSV Format
ALS_SIF	MASK	8	ALS SIF Format
Amdel_SIF	MASK	8	Amdel SIF Format
Analabs_SIF	MASK	8	Analabs SIF Format
Genalysis_CSV	CSV		Genalysis CSV Format
Genalysis_SIF	MASK	8	Genalysis SIF Format
KAL_CSV	CSV	19	KAL CSV Format
KAL_SIF	MASK	8	KAL SIF Format
SGS_SIF	MASK	8	SGS SIF Format
Ultratrace_SIF	MASK	8	Ultratrace SIF Format
XRF	CSV		XRF
HAL	MASK		Historic Assay Loader Dummy Layout

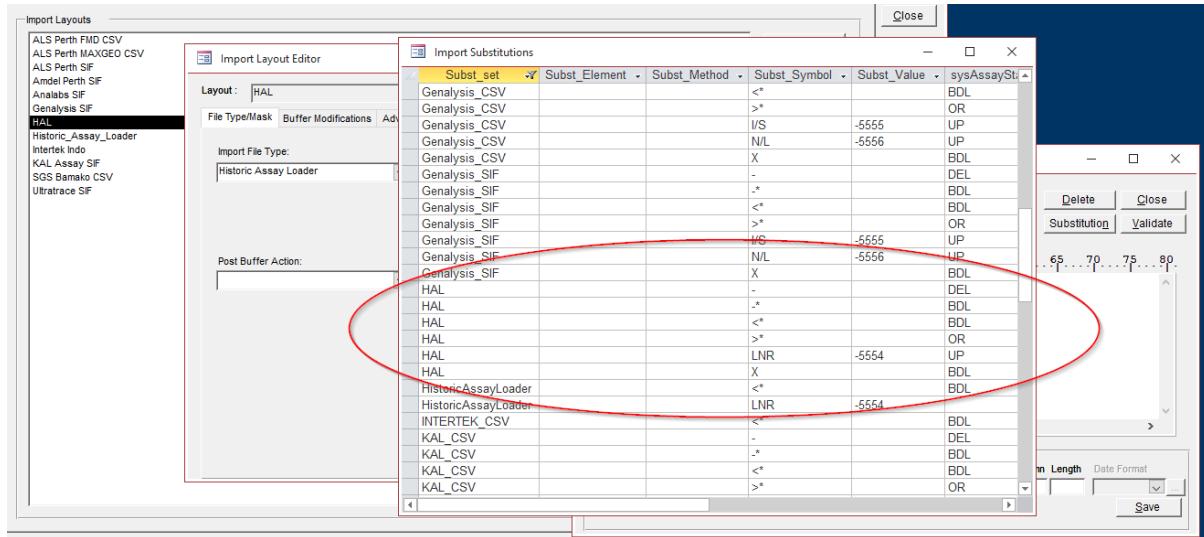
Select the new layout



Select to modify your new dummy layout and add the import substitutions:



Add the substitutions



- Add as many substitutions as required, for BDL, LNR, OR etc.
- Run your assay merging and the sysAssayStatus should be updated in the Incoming Assay Data table for any BDL and Assay Substitution values that have been set up.
- For the BDLs the HAL also recognises that the Limit Lower is the numeric value to the right of the “-“ and/or “<“ symbol, and the Limit Upper is the value to the right of the “>“ symbol.
- The only time a Limit Lower is NOT populated is when the substitution symbol is an “X”. This is because there is no numeric value for the process to work out what the limit should be. In these instances, it is straightforward to simply update the Limit Lower via a simple SQL script:

For example:

```
UPDATE tblSYSAssIncomingData SET tblSYSAssIncomingData.LimitLower = 0.01
WHERE tblSYSAssIncomingData.LabCode='COMP_ALS'
AND tblSYSAssIncomingData.Batch_No='COMP_ALS'
AND tblSYSAssIncomingData.AssayResult='X'
AND tblSYSAssIncomingData.sysAssayStatus='BDL'
```

By default maxgeo sets the Limit Lower to 0.01 for ppm Au and 0.001 for ppb Au.

For other elements if the Limit Lower is unknown for “X” maxgeo typically sets it to the minimum value for that element.

### Support

If you have any further questions about the Historical Assay Loader please do not hesitate to contact your maxgeo DBA or maxgeo support at [servicedesk@maxgeo.com](mailto:servicedesk@maxgeo.com)